

US EPA ARCHIVE DOCUMENT

## Coverdale Crossroads Community In Action - Partnerships That Work!

The Coverdale Crossroads Community is located in Sussex County, Delaware. Representative of a "strong communities initiative", DNREC entered into a partnership with the Coverdale Crossroads Community and First State Community Action to upgrade septic systems and wells in October, 1997. Contaminated drinking water wells and nutrient loss to surface and groundwater supplies resulting from failing septic systems made this community and its surrounding environment a priority. A three-year workplan was developed and is being funded by Delaware's Nonpoint Source Program at \$150,000/year.

Partnerships were developed with Greenwood Trust Bank and the Sussex Conservation District to provide matching funds in excess of \$100,000. During the first year of implementation, the project had to overcome a number of unanticipated hurdles, resulting from some community citizens living in sub-standard housing. An upgraded septic system and well is of little use without electricity and plumbing. By the end of the first year, DNREC joined forces with the Delaware Housing Authority and donated homes were provided to those in need.

The project utilized the local Prison Boot Camp and Work Release Program for demolition of substandard homes and clearance of debris and trees to make way for subsequent installation of new septic systems and wells.



*This photo shows a new septic tank being placed in the ground on a lot that was cleaned up by removing two tons of trash.*

The Sussex County Council provided \$12,000 to cover trash disposal costs. Residents have contributed their time and efforts by helping to remove debris and coordinate and provide temporary housing for those displaced. They have contributed financially as well. The last and final year has added yet another partnership with the Resource Conservation and Development Council who is lending its support in coordinating the final year of implementation and the installation of new housing.

Follow-up education is provided after installation to each homeowner on maintenance of the systems. By the end of September 2000, approximately 100 septic systems and over 50 wells will have been upgraded.



*This photo shows a typical well with a hand pump used for water.*

The majority of the 100 replacement systems will be gravity systems, with the exception of a few low pressure pipe systems. In most cases, prior to restoration, the owner was utilizing a cesspool, a failed septic system, or no system at all. Based on studies conducted in the Inland Bays Watershed, a gravity system has an efficiency rating for nutrient removal as follows: ammonium (25%), nitrate (35%), and total phosphorus (90%). The efficiency rating for the low pressure pipe systems is as follows: ammonium (94%), nitrate (66%), and total phosphorus (90%). Prior to the implementation of these replacement systems, remediation of nutrient loads were negligible. Through partnerships, this project has provided direct environmental benefits to ground and surface waters while improving the standard of living for many residents of Coverdale Crossroads.